

Literacy Instruction for Students with Significant Disabilities

"Communication is when one person shares something the other person did not know they were thinking."

—Erin Sheldon

What is symbol-based communication?

Symbol based communication is the “**alternative**” in augmentative and alternative communication (AAC). Taking a closer look at the elements of AAC allows us to see where symbol-based communication fits within this context:

- **Augment** means to add to or to enhance. Almost all speakers and non-speakers augment speech by using eye pointing, vocalizations, gestures and body language.
- **Alternative** means replacement or substitute. An alternative to speech includes pointing or gazing to symbols, signing or spelling.
- **Communication** means to send and receive messages with at least one other person.

Symbol-based communication is often used by individuals who are unable to communicate using speech alone and who have not yet developed, or have difficulty developing literacy skills. Symbols offer a visual representation of a word or idea.

“The immediate goal is NOT for students to use all of the symbols we’ve introduced functionally in their own communication but for them to interact with others who are modelling symbol-based approaches to communication.” – Karen Erickson

Which students would benefit from symbol-based communication?

Students whose speech is:

- slow to develop
- difficult to understand (as a back up)
- very limited or non-existent

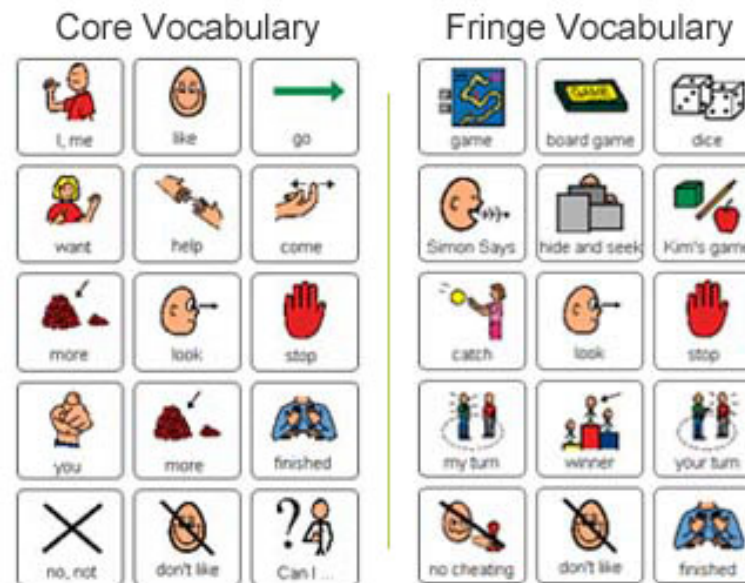
How can students benefit from symbol-based communication?

Students who are provided authentic and meaningful opportunities to communicate using a symbol-based system across learning and living environments benefit in a multitude of ways including:

- development of language skills

- development of literacy skills
- having more to say to more people
- building relationships and connectedness and belonging
- decreasing frustration/behaviours
- developing a better understanding of the world around them
- making personally meaningful requests, choices and decisions
- increasing participation across environments
- building creativity and self-expression

Examples of symbol-based communication:



Communication boards make language visible and accessible. **Core vocabulary** is intended to be used across all environments and levels of language competence.



A **flip book** is a communication book with tabs for easy navigation. Vocabulary is arranged by categories, which are indicated on the tabs.

How to make a low-tech basic flip book:

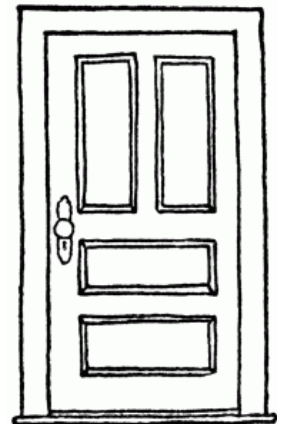
wp_42b_low_tech_flip_board

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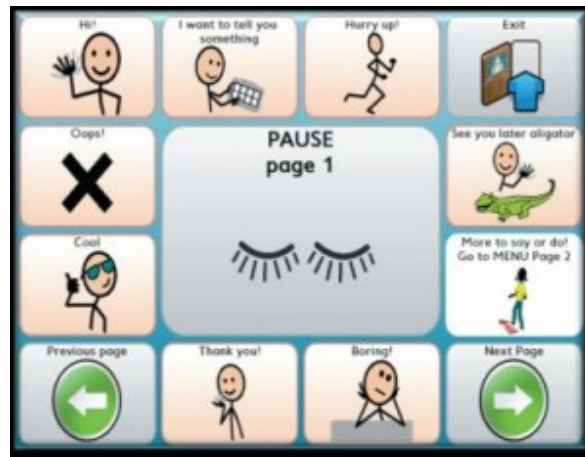
(http://blc.essentialconditions.ca/wp-content/uploads/2016/03/wp_60_low_tech_flip_board.pdf)

Eye-gaze (also known as eye-pointing) is the act of using one's eyes to direct or redirect the attention of another person. Effective eye-gaze requires participation of both the student and the communication partner. The student fixes their gaze in the direction of the intended message. For example, if a student wants to go outside, they may set their gaze on the door.





An **e-tran**, or an eye gaze communication board, is a vertically held/mounted board, made of plexiglass or sturdy paper with a window cut in the middle, that enables students to communicate by focusing their gaze on selected items displayed on the board. Items can be displayed in any configuration and can be encoded to provide more choices on each board. Students access the ETran via Partner Assisted Scanning.



This pragmatically based communication page set is specifically made to help eye gaze users hold simple conversations around a variety of topics and needs



An iPad communication app allows the user to directly select symbols that are arranged to support a specific topic or serve a communicative function. For example, this page is a list of verbs in alphabetical order- find, fly, give, help. The pages on many apps are dynamic, meaning once the user selects a message, the app will jump to the next logical page.

How can we teach symbol-based communication?

If we expect learners to speak using symbols, we must speak using symbols. **Aided Language Stimulation** or **Aided Language Input** is a research-based strategy (<http://search.asha.org/default.aspx?q=aided%20language%20stimulation>) for teaching symbol-based communication. Essentially, communication partners model or demonstrate symbol-based communication when talking with students who are learning to use symbol-based communication.

A robust and well-organized set of symbols need to be available in order to demonstrate how they can be used to comment, ask questions, make requests, joke, greet, protest and so on at home, school and in the community. Using the same well-organized set of symbols flexibly in all environments supports communication development and language learning over time.

Following are a few points to keep in mind when modeling symbol-based communication:

- Communication partners model, not prompt the students to point or touch the picture symbols to communicate. **It is about what the communication partners do**, not about what the student does.
 - Use the student's AAC system to model and have conversations.
 - Provide models of **multiple communicative functions** and purposes such as:
 - Sharing information: "I heard you went to see Spider Man on the weekend"
 - Making comments: "That's awesome!"
 - Asking questions: "What is your favourite colour?"
 - Greeting: "Hi! I'm happy to see you today!"
 - Requesting: "I want the red ball." "I need help."
 - Protesting/Refusing: "I don't like that." "All done." "Stop!"
-
- When a student communicates something by looking at an object or making a noise, demonstrate how they could "say it" on their AAC system.
 - Read and match the student's non-verbal signals with pictures. Look for what the student communicates with body language and gestures and **match those with symbols**. For example, if a student puts their head down on the table, the adult could point at tired symbol and say, "You look tired."

- Point out the main words that **you** say on the AAC system.
 - Whenever the student uses their AAC system, model their message back in a slightly longer form. For example, when the student points to 'book' on their AAC system, point out 'want book' as you say, "You want a book?" Then point out 'get book' as you say, "OK. I'll get you a book".
 - Model only a few more words per utterance than the student is using – this way the modeling is not too hard for the student to copy.
-

What is core vocabulary?

About 85% of our English spoken language is comprised of 250-350 words. Core vocabulary is a relatively small set of words that have been determined to be highly useful for communicating in both social and academic contexts. Core vocabulary is primarily composed of pronouns, verbs, descriptors, and prepositions. There are very few nouns.

The DLM Core Vocabulary Project was initiated to determine the vocabulary that is necessary for students with significant cognitive disabilities to engage, learn, and demonstrate knowledge in an academic environment.

These words have been extensively researched by the Center for Literacy and Disability Studies for words needed for AAC Core vocabulary and Academic Core Vocabulary.

Vocabulary Decisions: Continuum of Usefulness

Useful for a wide range of purposes in a variety of contexts on numerous topics

Useful for restricted purposes in limited contexts on a specific topic



Lots of opportunities to teach throughout the day.

Opportunities limited to specific activities or specials.

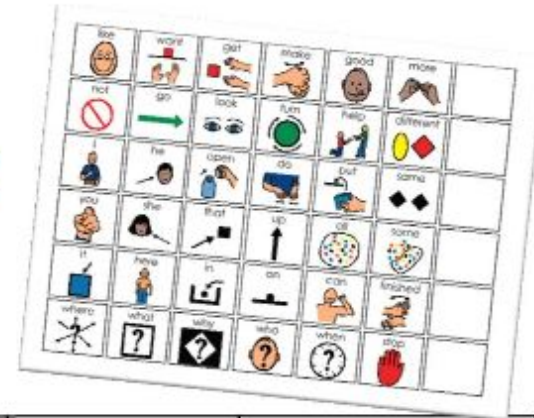


Center for Literacy &
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University of North
Carolina at Chapel Hill



Universal Core Vocabulary: First 36



like	want	get	make	good	more
not	go	look	turn	help	different
I	he	open	do	put	same
you	she	that	up	all	some
it	here	in	on	can	finished
where	what	why	who	when	stop



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Where can I learn more?

Aided Language Videos

<https://www.youtube.com/watch?v=vUY6oQoSTXw>

(<https://www.youtube.com/watch?v=vUY6oQoSTXw>)<https://www.youtube.com/watch?v=fIFNMky22-U>

(<https://www.youtube.com/watch?v=fIFNMky22-U>)

Center for Literacy and Disability Studies – Universal Core Boards

<http://www.med.unc.edu/ahs/clds/resources/universal-core-boards>

(<http://www.med.unc.edu/ahs/clds/resources/universal-core-boards>)

Dynamic Learning Maps (DLM) – Beginning Communicators

This module describes symbolic and non-symbolic forms of communication, the distinction between pre-intentional and pre-symbolic communicators, and identifies additional sources of support for building communication skills.

Online Self-directed Module (https://unc.az1.qualtrics.com/SE/?SID=SV_24D7J5kLX6zsjpr)

Facilitated Module Materials for Groups (<http://dlmpd.com/beginning-communicators/>)

Dynamic Learning Maps (DLM) – Core Vocabulary

Core Vocabulary is a list of words that have been determined to be highly useful for communicating in both social and academic contexts. <https://www.med.unc.edu/ahs/clds/resources/core-vocabulary>

(<https://www.med.unc.edu/ahs/clds/resources/core-vocabulary>)

Dynamic Learning Maps (DLM) – Core Vocabulary and Communication

This module focuses on the use of core vocabulary as a support for communication for students who cannot use speech to meet their face-to-face communication needs and require augmentative and alternative communication.

Online Self-directed Module (https://unc.az1.qualtrics.com/SE/?SID=SV_8wRFx51Dqu7OgV7)

Facilitated Module Materials for Groups (<http://dlmpd.com/dlm-core-vocabulary-and-communication/>)

Dynamic Learning Maps (DLM) – Speaking and Listening

This module addresses speaking and listening in the broader context of expressive and receptive communication for students with significant cognitive disabilities. The content in this module is important to understand the DLM Essential Elements in Speaking and Listening and across all of the strands of Essential Elements in English language arts.

Online Self-directed Module (https://unc.az1.qualtrics.com/SE/?SID=SV_9SPPtNt46NdK4i9)

Facilitated Module Materials for Groups (<http://dlmpd.com/speaking-and-listening/>)

Dynamic Learning Maps (DLM) – Supporting Participating in Discussion

Participants will review the goals of supporting participation in discussion and the need of an expressive means of communication for all students. Participants will also be given 5 strategies to use in supporting students during discussions with teachers and peers.

Online Self-directed Module (https://unc.az1.qualtrics.com/SE/?SID=SV_dcCWnOd8lBvqBVz)

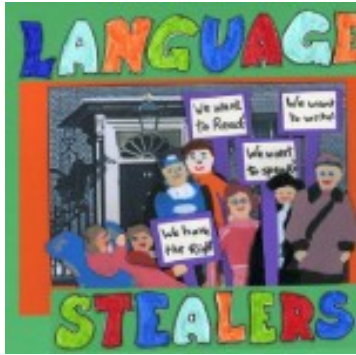
Facilitated Module Materials for Groups (<http://dlmpd.com/supporting-participation-in-discussion/>)

Dynamic Learning Maps (DLM) – Symbols

This self-directed module provides an overview of symbols to support communication and interaction. It also describes the use of symbols and photographs in text.

Online Self-directed Module (https://unc.az1.qualtrics.com/SE/?SID=SV_bBep1EsSGDdEkvP)

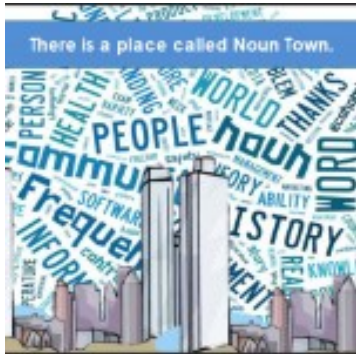
Facilitated Module Materials for Groups (<http://dlmpd.com/symbols/>)



The Language Stealers (video 2:52 min)

Language Stealers reveals the real barriers to communication for learners with speech and motor impairments as being no access to language and literacy.

<https://www.assistiveware.com/teaching-core-words-building-blocks-communication-and-curriculum> (<https://www.assistiveware.com/teaching-core-words-building-blocks-communication-and-curriculum>)



(<https://www.youtube.com/watch?v=fIFNMky22-U>) Noun Town

This short presentation shares the importance of using high frequency words, instead of living in 'Noun Town.'

(<https://www.youtube.com/watch?v=fIFNMky22-U>) <https://aaclanguagelab.com/files/nountown.pdf>
(<https://aaclanguagelab.com/files/nountown.pdf>)

Symbols and Learning to Read

<http://www.engagingalllearners.ca/ip/conversation-with-caroline-musselwhite/#3>



(<http://www.engagingalllearners.ca/ip/conversation-with-caroline-musselwhite/#3>)

- In this short video clip, Dr. Caroline Musselwhite talks about how symbols can affect the reading process and to be effective supports in learning to read, symbols must be used thoughtfully.
- Learning Guide: Symbols and Learning to Read

(http://www.engagingalllearners.ca/ip/conversation-with-caroline-musselwhite/documents/3_symbols_learning.pdf)

Top 10 Tips for Partner Assisted Scanning (<http://blc.essentialconditions.ca/wp-content/uploads/2016/03/Top10TipsPAScanning.pdf>), Gretchen Hanser, Ph.D., Center for Literacy and Disability Studies, 2007.



PODD

Pragmatic Organization Dynamic Display communication books were developed in Australia by Gayle Porter, originally for children with cerebral palsy. Their structured organization and emphasis on visual communication means that they are also a valuable tool for developing the communication of those with Autistic Spectrum Disorder (ASD) (Porter & Cafiero, 2009). <http://praacticalaac.org/practical/how-i-do-it-using-podd-books-and-aided-language-displays-with-young-learners-with-autism-spectrum-disorder>

(<http://praacticalaac.org/practical/how-i-do-it-using-podd-books-and-aided-language-displays-with-young-learners-with-autism-spectrum-disorder>)



(<https://www.erc.ca>)



(<https://arpdc.ab.ca>)

Alberta **Regional** Consortia

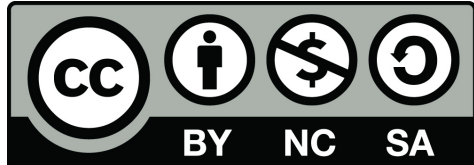
ABOUT ERLC

The *Edmonton Regional Learning Consortium* (<http://www.erc.ca>) (ERLC) is one of seven regional consortia in Alberta established to support regional professional development needs for all those who influence student learning.

For more professional learning resources,
please visit [ARPDC PD Resources](http://www.erc.ca/resources/). (<http://www.erc.ca/resources/>)

SUPPORT FOR IMPLEMENTATION

The resources found on this site were developed by the ERLC, a member of Alberta Regional Professional Development Consortia (ARPDC), as a result of grants from Alberta Education, to support implementation.



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